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Business Systems Modernization Overview & Background

Business Systems Modernization, or BSM, represents two of the Internal Revenue Service's Five Levers of Change – revamped business practices and new technology. It continues the IRS modernization process and builds on the Organizational Modernization effort that resulted in a new, customer-focused IRS that started Oct. 1, 2000.

Crucial Need

The U.S. tax system produces more than $2 trillion in gross revenue each year. That's 95 percent of the government's revenue and it's totally dependent on a collection of computer systems that evolved over 35 years. Nearly all IRS employees depend on these computer systems to do their daily jobs, including more than 70,000 who use these systems to deliver direct service to taxpayers.

The IRS network is composed of:
- 40 mainframe computers,
- 871 midrange computers,
- more than 100,000 individual computers,
- 2,779 vendor supplied software products, and
- more than 50 million lines of IRS maintained computer code.

Maintaining these systems year after year takes skilled and dedicated people But there are problems they can't fix:
- The IRS had to spend $1.4 billion to prevent a system meltdown caused by the Y2K bug.
- American taxpayers expect a level of service from the IRS that rivals the private sector -- these systems can't support it.
- IRS employees must work with taxpayer data that are not timely -- which frustrates employees and taxpayers.
- Updating our systems with tax law changes or new IRS services can be slow and unreliable.
- The General Accounting Office says the IRS has trouble accounting for funds and maintaining the security of critical data and systems.
- And with these systems, the IRS can't take full advantage of the Internet to serve its customers better.

These problems and issues aren't new, and there are myriad reasons why the IRS needs to rebuild its technology. But modernizing these systems is extremely complex, expensive, and gigantic in

scope. Addressing these crucial needs, managing the inherent risks of modernization and delivering a level of service America expects is the business of Business Systems Modernization.

Process

BSM is a big job. Projections are that BSM will last 10-15 years. So how do you go about tackling one of the biggest ventures of its kind? There are four key elements:

- **Partnership** -- You get help.
- **Methodology** -- You get a guide, a process, that helps ensure no detail is left to chance in the process of choosing which products are best to build or buy. You follow a step-by-step approach in planning, developing, implementing and deploying BSM results -- hardware, software and business practices.
- **Management & Governance** -- You make sure you have strong management processes, and you make sure that everyone knows what's going on so they know things are being done right.
- **Projects** -- You divide the work into small parts. Projects or Integrated Product Teams (IPTs) are where the real work of BSM gets done. Each project is responsible for an aspect of BSM, yet it must integrate, collaborate and coordinate with all other projects to ensure all the parts fit together. It's an intricate puzzle.

Partnerships

PRIME Alliance

IRS hired Computer Sciences Corporation as its prime contractor for BSM. IRS and CSC together with several other leading technology and management companies form the Prime Alliance. This alliance forms the main public/private partnership in BSM:

- **Computer Sciences Corp.**
- **SAIC**
- **IBM**
- **KPMG** - Peat Marwick
- **Logicon**
- **Unisys**
- **Avaya**

MITRE -- http://www.mitre.org/about/irs/

MITRE is a not-for-profit corporation that works in partnership with government clients.

- MITRE's work for the IRS is focused within a Federally Funded Research and Development Center (FFRDC). A FFRDC is a unique organization that brings together the expertise and outlook of government, industry and academia to solve complex technical problems that cannot be solved by any one group alone.

- MITRE provides the IRS with independent, expert and objective advice and guidance on strategic, technical, and program management issues.
- MITRE helps IRS officials determine, monitor, and evaluate the technical direction of the modernization effort in an environment free from both internal constraints and external market and profit-related influences.

Booz-Allen Hamilton
Booz-Allen Hamilton is a leading management and technology consulting firm focused on business strategy and transformation. BAH was the major contractor in the IRS organizational modernization effort. Major areas of expertise include:
- Organization and Strategic Leadership
- Strategy and Corporate Finance
- Operations Management
- Information Technology
- Technology Development.

Business Operating Divisions
The new IRS business operating divisions are integral partners of BSM. Operating divisions provide employees to staff Integrated Product/Project Teams. They also sponsor BSM projects and programs designed to solve division problems, providing business requirements and subject matter expertise for strategies and planning.

Methodology
The IRS uses a system called the Enterprise Life Cycle (ELC) to plan and manage work throughout BSM. The ELC establishes a set of repeatable processes and a system of reviews, checkpoints, and milestones that reduce the risks of system development. Every product in the ELC process must be reviewed, accepted and approved before it moves to the next milestone. There are several review processes and strict measurement criteria that help reduce risks and ensure even the smallest detail isn't overlooked.

At a basic level, the intent of the ELC is to reduce the risk that IRS will pursue a software or hardware solution that doesn't solve the right problems, or one that isn't considered in the context of other solutions. If you followed this kind of process at home, it would prevent you from running out and buying the latest PC game, then finding out after loading it on your machine that it doesn't work with your video and sound hardware. The ELC helps ensure that IRS and the Prime Alliance are managing the risks and considering all the options at every step of development.

ELC Milestones	Description
Milestone 1 **Business Vision**	Executive leadership identifies the direction and priorities for IRS business change. This vision and strategy guides which business areas and system development projects are funded for further analysis.
Milestone 2 **Business Systems Concept**	Establishes a project concept, its requirements and design elements as a solution for a specific business area or system. A preliminary business case is produced.
Milestone 3 **Business Systems Design**	Major components of the business solution are analyzed and designed. A baseline business case is produced.
Milestone 4 **Business Systems Development**	The business solution is built. The system is integrated with other business systems, is tested, and piloted. The system is prepared for deployment at its intended sites.
Milestone 5 **Business Systems Deployment**	The business solution is fully deployed, including training on use and maintenance.

Everyone associated with BSM wants to make certain that taxpayer money is wisely spent. That's why at no point along the path to modernizing IRS' business systems does the IRS walk alone. And that's good because there are inherent risks.

Managing risk is part of BSM and "governance" is one of the ways it is managed. Governance is an umbrella term that refers to a strong management system that manages program risks and processes, and to the monitoring of those efforts by several oversight agencies.

Oversight
- Government Accounting Office

- Department of Treasury
- Office of Management and Budget

Congress, the General Accounting Office (GAO), the Treasury Department, and the Office of Management and Budget evaluate and monitor the processes of BSM.

These oversight agencies provide direct feedback and advice to BSM managers through a process called "constructive engagement." The relationship between these oversight groups and the IRS is open and there is constant communication. IRS has already benefited from GAO's comments and the input from other oversight organizations. All of these efforts are geared toward ensuring that BSM is successful at every step.

Management
The Business Systems Modernization Program is managed by the:
- **Core Business Systems Executive Steering Committee**. This steering committee approves all funding and makes other key decisions, such as advancing a project from one milestone to the next. The committee is led by the Commissioner and membership includes key executives and stakeholders and representatives from the Treasury Department.
- Business Systems Modernization Office (BSMO). The BSMO is responsible for managing the execution of the Business Systems Modernization Program. It includes executives with extensive private sector experience, and key internal executives with many years of experience in tax systems and tax administration.

Cost & Funding
The Business Systems Modernization program is funded by a special account set up by Congress called the Information Technology Investment Account (ITIA). Congress recognized that a program of this size and complexity must be managed as an on-going program with an assured source of funding. How much it will ultimately cost is not fully determined. Given its size, complexity, and value, it's safe to say the price tag will be in the billions.

Funding for BSM activities has four distinct procedures, each with its own set of steps and organizational components.
1. **Appropriations**. Congress funds the ITIA account as part of the annual appropriation process. These funds are set aside and cannot be spent until they are specifically released.
2. **Funding Releases**. To get ITIA funds, the IRS prepares a release request specifying what activities need funding during a specified period. This funding request is reviewed and approved in sequence by the Treasury Department, OMB, and the House and Senate

Appropriations Subcommittees. (GAO reviews the request and reports to the subcommittees.)

3. **ESC approval**. Although funds are available to the IRS based on funding releases, no funds can be spent until the Core Business Systems Executive Steering Committee reviews and approves each specific request. These requests are usually based on completion of a specific milestone in the Enterprise Life Cycle.

4. **Contracting**. Once funds are approved by the Executive Steering Committee, task order contracts are negotiated. Increasingly, all major task order contracts are being set up on a performance basis in which the contractor agrees to specified performance targets and costs. Only when contracts are signed is money actually obligated.

Summary of Information Technology Investment Account Funding

APPROPRIATIONS (in millions) As of January 2001		
Fiscal Year	Amount	Cumulative Amount
FY98	295	295
FY99	211	506
FY2000	No request	--
FY2001	72	578
FUNDING RELEASES		
Date	Amount	Cumulative Amount
June 28, 1999	35	35
November 22, 1999	33	68
April 18, 2000	148	216
September, 2000	33	249
November, 2000	200	449
OBLIGATIONS		
Quarter	Amount	Cumulative Amount
3rd FY 1999	7	7

4th FY 1999	19	26
1st FY 2000	7	33
2nd FY 2000	26	59
3rd FY 2000	23	82
4th FY 2000	142	224
1st FY 2001	7	231